

REMARKS

Claims 1, 2, 4-15, and 18-20 are pending in the present Application. Examiner's remarks in the February 25, 2010 Office Action are acknowledged and appreciated.

Examiner has finally rejected claims 1, 2, 4-13, 15, and 18 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,470,329 to Livschitz ("Livschitz"). Livschitz is directed to methods of synchronizing data sets stored in distributed memories. Livschitz teaches several embodiments of synchronization methods, the most basic of which are shown in Figs. 1-3. "[T]he method for synchronizing two data sets comprises computing a signature for a first data set in a first address space and a signature for a second data set in a second address space using a one-way hash function. The method further includes comparing the signatures for the first and second data sets to determine whether they are identical. If the signatures are not identical, the method further includes identifying an area of difference between the first data set and the second data set and transferring data corresponding to the area of difference between the first data set and the second data set from the first data set to the second data set." Col. 2, lines 39-50. When the data sets are large, the data sets can be subdivided into elementary data blocks and the hash signatures of the respective data blocks are compared. See col. 2, lines 51-64 and col. 6, lines 13-37.

Livschitz teaches that different hash functions may be used in data synchronization. One embodiment disclosed by Livschitz proposes to "subdivide the first data set into elementary data blocks, compute a signature for each elementary data block using a first one-way hash function, store the signatures of the elementary data blocks in a first array, and compute a signature for the

first array using a second one-way hash function." Col. 3, lines 58-63, emphasis added. A more detailed description is found regarding Fig. 7. "[T]he signature of each elementary data block 42, 44 of the data sets A and B are computed upfront, as indicated at 52 and 54, and stored in arrays hA and hB in address spaces M1 and M2, respectively. Unique signatures are next found using a process similar to the one described in FIGS. 1-4...A hash function G operates on the arrays hA and hB to produce the signatures g(hA) and g(hB). Typically, the hash function G will be different from the hash function H...[T]he process then proceeds to isolate the elements of the arrays hA and hB that are different. A recursive process similar to the one illustrated in FIGS. 2 and 3 is used to isolate the elements of the arrays hA and hB that are different." Col. 7, line 66 - col. 8, line 19, emphasis added.

Applicants have claimed in claim 1 that the circuitry be configured to:

- "generate first and second hashes,
- ...the first hash being formed over at least a first part of the mobile-copy database...
- ...the second hash being formed by the circuitry over a sub-part of the first part of the mobile copy database..."

Applicants' claimed invention thus forms two hashes and both are taken from the database data.

Livschitz teaches taking a hash from a part of a database and then taking a hash of an array formed from the hashes. The methods are significantly different in this respect.

Moreover, Applicants have claimed in claim 1 that the circuitry be configured to:

- "determine whether the first part of the mobile-copy database is out of match with a corresponding first part of the network-copy database,

- ...the second hash being formed ... upon a determination that the first part of the mobile-copy database and the first part of the network-copy database are out of match..."

Applicants' claimed invention requires that the formation of the second hash is dependent upon a finding that there is a mismatch between the mobile-copy and network-copy first hash. Livschitz does not teach this dependency. Livschitz takes a first hash, stores it as an array, and takes a second hash; there is no conditional requirement for the taking of the second hash.

The hallmark of anticipation is a finding of prior invention. Accordingly, the standard of rejection for §102 anticipation requires that the single reference must teach every aspect of the claimed invention either explicitly or impliedly, and in the same arrangement as found in the claim. See MPEP §706.02. As discussed above, Livschitz does not disclose, or suggest for that matter, at least two significant elements of Applicants' claimed invention. Since Livschitz does not teach Applicants' claimed invention, a §102 rejection is improper and claim 1 is believed allowable. Claims 2 and 4-13 are dependent upon a presumed allowable claim 1 and are therefore, themselves, believed allowable.

Independent claim 15 includes the unique limitations discussed above: "...generating a first hash value in the mobile node from the mobile-copy of the database...if...the mobile-copy database and the network copy database are out of match, thereafter generating a second hash value in the mobile node from a portion of the mobile-copy of the database..." Accordingly, claim 15 is, for the reasons given with respect to claim 1, also believed allowable. Claim 18 is dependent upon a presumed allowable claim 15 and is therefore, itself, believed allowable.

Examiner has finally rejected claims 14, 19, and 20 under 35 U.S.C. §103(a) as being unpatentable over Livschitz in view of U.S. Patent No. 5,684,990 to Boothby. Claim 14 is ultimately dependent upon a presumed allowable independent claim 1 and claims 19 and 20 are ultimately dependent upon a presumed allowable independent claim 15, as such claims 14, 19, and 20 are, themselves, presumed allowable.

Accordingly, Applicants believe the present Application to be in a condition suitable for allowance. Examiner is respectfully requested to enter the present Amendment/Response, reconsider the present claims and withdraw the §§102 and 103 rejections, and pass the present Application to allowance. In the alternative, Examiner is respectfully requested to enter the present Amendment/Response as placing the present Application in a better condition for appeal.

Respectfully submitted,

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